



# Electrical Technician

## CURRICULUM

83 Lecture hours

117 Lab hours

**200 Total Hours**

## Curriculum

ELEC 101	Fundamentals & OSHA Safety	Electrical theory, Electrical terms, Safety (OSHA practices), NEC Codes. Installing outlets, wiring switches, receptacles, and lights	10 lecture hours + 14 lab hours	24 total hours
ELEC 102	Material Handling	Electrical boxes, tools (tool safety), alternative energy, ohms law. Reading, understanding wiring diagrams, material recognition, installing romex, proper terminating.	10 lecture hours + 14 lab hours	24 total hours
ELEC 103	OSHA Regulations & Electrical Testing	Structure terminology, Lockout/Tagout (LoTo), NEC/Ladder safety. Electrical voltage testing, electrical installation of (J) boxes, sizing.	9 lecture hours + 15 lab hours	24 total hours
ELEC 104	Wiring	Electric feeders, electric circuit principles, planning circuits, individual branch circuits. Splicing conductors, installing cables, marking and installing branch circuits, terminating conductors.	9 lecture hours + 15 lab hours	24 total hours
ELEC 105	Conduit & Construction Safety	Types of conduit, construction safety, conduit formulas, conduit fittings. Bending & installing conduit, pulling conductors, bracing and proper strapping.	9 lecture hours + 15 lab hours	24 total hours
ELEC 106	Code Requirements	Service load calculations, types AFCI & GFCI, how AFCI & GFCI work, code requirements for AFCI & GFCI. Installing GFCI, installing AFCI, outlet spacing, surge protector installation	10 lecture hours+ 14 lab hours	24 total hours
ELEC 107	Installation	Voltage drop calculations, box fill, types SEP & Sub-panels, breaker types, panel clearances. Mounting SEP, breaker installation, panel wiring, ground rod installation.	9 lecture hours + 15 lab hours	24 total hours
ELEC 108	Grounding	Grounding conductor sizing panel, bonding ampacities of conductors. Building & installing panels (service), meter box installation, grounding & clearances.	9 lecture hours + 15 lab hours	24 total hours
CSA 101	Career Service Assistance & Job Search	Career Service Assistance & Job Search	8 lecture hours + 0 lab hours	8 total hours